	Application No.	Applicant(s)
Office Action Summary	09/709,436	MOTOMURA, HIDETO
	Examiner	Art Unit
	Michael Burleson	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _1_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-44_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claim(s) _1-44_ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

1.   Restriction to one of the following inventions is required under 35 U.S.C. 121:

I.   Claims 1-21, drawn to normalizing and exchanging color information between a source device and an output device, classified in class 358, subclass 1.6.

II.   Claim 22, drawn to color mapping, classified in class 358, subclass 1.9.

III.   Claims 23 and 24-36, are drawn to re-mapping pre-mapped colors and transmitting color information, classified in class 358, subclass 2.1.

IV.   Claim 37-40, drawn to mapping a cusp of a source device to an output device, classified in class 358, subclass 515.

V.   Claim 41-42, drawn to finding lightness of a mapping point, weighing the lightness and two-dimensional coordinates formed by lightness, classified in class 358, subclass 520.

VI.   Claims 43 and 44, drawn to a gamut shape control coefficient calculator and main mapping section, classified in class 358, subclass 518.

1.   The inventions are distinct, each from the other because of the following reasons:

2.   Invention Groups I and II-VI are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other

combinations (MPEP § 806.05 (c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention in regards to Group I discloses normalizing and exchanging color information between a source device and an output device by using statistical process based on colorimetric values. Regarding Group II, subcombinations discloses of color mapping and naming a database for the source and output devices. Regarding Group III, subcombinations disclose re-mapping pre-mapped colors using weighted coefficients. Regarding Group IV, subcombinations also discloses mapping a cusp of a source device and the color names are a basic, memorized color set by the viewer. Regarding Group V, subcombinations disclose find the lightness of a mapping point and two-dimensional coordinate points formed by maximum lightness of a source device. Regarding Group VI, subcombinations also disclose pre-mapping every color outside a gamut of an output device into the gamut of the output device with lightness and chroma. Regarding Group II, the subcombination has separate utility because it can be used to name a color database for the source and output devices. Regarding Group III, the subcombination has separate utility because it can be used to observe, name and group test colors. Regarding Group IV, the subcombination has separate utility because it can be used to group, name and memorize color names by the viewer. Regarding Group V, the subcombination has separate utility because it can be used for non-linear mapping and finding the lightness of a mapping point. Regarding Group VI, the subcombination has separate utility because it can be used to pre-map every color rendered on a source device and naming a color database for storing gravity vector.

3.   Invention Groups II and III-VI are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05 (c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention in regards to Group II discloses color mapping between a source device and an output device. Regarding Group III, subcombinations disclose re-mapping pre-mapped colors using weighted coefficients. Regarding Group IV, subcombinations also discloses mapping a cusp of a source device and the color names are a basic, memorized color set by the viewer. Regarding Group V, subcombinations disclose find the lightness of a mapping point and two-dimensional coordinate points formed by maximum lightness of a source device. Regarding Group VI, subcombinations also disclose pre-mapping every color outside a gamut of an output device into the gamut of the output device with lightness and chroma. Regarding Group III, the subcombination has separate utility because it can be used to observe, name and group test colors. Regarding Group IV, the subcombination has separate utility because it can be used to group, name and memorize color names by the viewer. Regarding Group V, the subcombination has separate utility because it can be used for non-linear mapping and finding the lightness of a mapping point. Regarding Group VI, the subcombination has separate utility because it can be used to pre-map every color rendered on a source device and naming a color database for storing gravity vector.

4.   Invention Groups III and IV-VI are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05 (c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention in regards to Group III discloses re-mapping pre-mapped colors using weighted coefficients. Regarding Group IV, subcombinations also discloses mapping a cusp of a source device and the color names are a basic, memorized color set by the viewer. Regarding Group V, subcombinations disclose find the lightness of a mapping point and two-dimensional coordinate points formed by maximum lightness of a source device. Regarding Group VI, subcombinations also disclose pre-mapping every color outside a gamut of an output device into the gamut of the output device with lightness and chroma. Regarding Group IV, the subcombination has separate utility because it can be used to group, name and memorize color names by the viewer. Regarding Group V, the subcombination has separate utility because it can be used for non-linear mapping and finding the lightness of a mapping point. Regarding Group VI, the subcombination has separate utility because it can be used to pre-map every color rendered on a source device and naming a color database for storing gravity vector.

5.   Invention Groups IV and V-VI are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for

patentability, and (2) that the subcombination has utility by itself or in other

combinations (MPEP § 806.05 (c)). In the instant case, the combination as claimed

does not require the particulars of the subcombination as claimed because the invention

in regards to Group IV discloses mapping a cusp of a source device and the color

names are a basic, memorized color set by the viewer. Regarding Group V,

subcombinations disclose find the lightness of a mapping point and two-dimensional

coordinate points formed by maximum lightness of a source device. Regarding Group

VI, subcombinations also disclose pre-mapping every color outside a gamut of an

output device into the gamut of the output device with lightness and chroma. Regarding

Group V, the subcombination has separate utility because it can be used for non-linear

mapping and finding the lightness of a mapping point. Regarding Group VI, the

subcombination has separate utility because it can be used to pre-map every color

rendered on a source device and naming a color database for storing gravity vector.

6.   Invention Groups V and VI are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as

claimed does not require the particulars of the subcombination as claimed for

patentability, and (2) that the subcombination has utility by itself or in other

combinations (MPEP § 806.05 (c)). In the instant case, the combination as claimed

does not require the particulars of the subcombination as claimed because the invention

in regards to Group V discloses the lightness of a mapping point and two-dimensional

coordinate points formed by maximum lightness of a source device.   Regarding Group

VI, subcombinations also disclose pre-mapping every color outside a gamut of an

output device into the gamut of the output device with lightness and chroma. Regarding

Group VI, the subcombination has separate utility because it can be used to pre-map

every color rendered on a source device and naming a color database for storing gravity

vector.

7.   Because these inventions are distinct for the reasons given above and have

acquired a separate status in the art because of their recognized divergent subject

matter, restriction for examination purposes as indicated is proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Burleson at (703) 305-8733. The examiner can

normally be reached Monday thru Friday, 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kimberly Williams can be reached on (703) 305-4863. The fax phone

numbers for the organization where this application or proceeding is assigned are

(7013) 872-9306 for regular communications and after final communications.

   Any inquiry of a general nature or relation to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

Mlb

September 30, 2004

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER